4U 157 48511

> J6 -0225575 10V 1985

85-321684/51 A97 E24 G02 SUMITOMO CHEM IND KK

SUMO 24.04.84 *J6 0226-575-A

24,04.84-JP-082305 (11.10.85) C09d-11 Ink compsn. for ink jet printing - comprises water, hydrophilic organic solvent and die

C85-139294

Ink compsn. for ink jet printing comprises 5-90wt.% water, 10-70wt.% hydrophilic organic solvent and 0.1-20wt.% dye contgreactive gp. (I) or (II) (X is releasable gp. coupled to the triazine ring via = N-, S- or O-, A is substit. non-reactive with cellulose or substit. reactive with cellulose in the presence of acid binder and Y is releasable gp. coupled to the ethylene gp. via = N. or S. or halogen atom).

The hydrophilic organic solvent is pref. 1-10C alkyl alcohol, ether (e.g. ethyl ether, butyl ether, ethylene glycol diethyl ether, ethylene glycol monoethyl ether), ketone (e.g. acetone, methylethyl ketone, methylpropyl ketone, methylamyl ketone or cyclohexanone), ester (e.g. ethyl formate, methyl acetate, ethyl acetate, propyl acetate, butyl acetate, phenyl acetate, ethylene glycol monoethyl acetate or ethyl lactate), polyol (e.g. ethylene glycol, diethylene glycol, propylene glycol or glycerin), amide (e.g. dimethylformanide or dimethylacetamide), polyalkylene glycol (e.g. polyethylene glycol or dimethylacetamide). polypropylene glycol), amine (e.g. diethanol amine or triethanol amine). N-contg. heterocyclic cpd. (e.g. pyrrolidone, N-methyl-2A(12-W7E) E(25-E) G(2-A4B)

pyrrolidone or 1,3-dimethyl-2-imidazolidinone) or intermolecular ester (e.g. butyrolactone, valerolactone, caprolactone, heptalactone.

octalactone or nonalactone).

The ink compsn. is opt. blended with surface tension controller, viscosity controller and/or UV ray absorber. In order to enhance the distinctness and fastness to light and water, the heated ink compsn.

is injected or printed image may be heated.

ADVANTAGE - The ink compsn. has high stability against continuous injection and long storage stability and provides image having high depth, distinctness and fastness to light and water. (7pp Dwg.No.0/0)

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74 F165883 518 1984

84-273894/44 RICOH KK 17.03.83-JP-043231	E13 F09 G05 P75 (25.09.84) B41m-05 D2	RICO 17.03.83 *J5 9169-883-A 16-01/38	E(7-D9) F(5-A6B, 5-A6D) G(2-A4A)		265
Ink jet recording med increase thermal and l	dium - has urocanic a	icid salt and amide to	,		
C84-116236					
support. USE/ADVANTAGE resistance and fastnethe selection of water salt and the urocanic and light stability a absorption in the uconventional absorbe to 10 times than the a and have such advant Therefore, it can rem	as cpd. of formula (I) of a Medium remarkably ss of colour printing pictorium soluble dyes to be sueracid amide of tormula and are greater in the ltraviolet section 2 to nts, and also higher in tabove, and guite free frotages as they can be tarkably prevent discolumprove the fastness 19/0)	y improves the light ture and can expand d. The urocanic acid (I) excel in thermal coefficient of light o 3 times than the he water solubility 2 om toxic character, nandled with safety. uration of the colour	CH=CH-R	(1)	

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:A 198187 FO 2 1024

84-315674/51 CANON KK

A97 E16 F09 G05 P75 (E14)

CANO 27.04.83

27.04.83-JP-072967 (09.11.84) B41m-05 D21h-01/28 D21h-03/12 *J5 9198-187-A Ink jet recording material - contains quat, ammonium hydroxide

C84-134737

A recording material to be used with an ink jet contains a quaternary ammonium hydroxide of formula (1) in the base material or in a coating layer formed on the base material.

$$\begin{bmatrix} R_1 & \Theta & R_2 \\ N & R_4 \end{bmatrix} \quad \text{OH} \Theta \qquad (1)$$

 R_{1-4} = alkyl (e.g., methyl, ethyl or dodecyl), an alcohol gp. (e.g. 2-hydroxyethyl or polyoxyethylene), an ether gp. an aromatic gp. (e.g. benzyl) etc. ADVANTAGES

The material rapidly absorb ink but does not bleed even when different colours of recording inks are applied on the same place within a short period of time. It therefore provides sharp images of high definition.

A(11-C4A, 12-W7F) E(10-A22) F(3-G, 5-A6D) G(5-F)

The material has an excellent light- and water-resistance.

TYPICAL QUAT. AMMONIUM CPD.

Tetra-2-hydroxyethy! ammonium hydroxide.

MANUFACTURE

The base material is, e.g., fabric, resin film or synthetic paper, etc. and (I) is added as an aq. soln. to a base material, e.g. in a paper-making process.

Alternatively, the base material is post-treated by dipping in a soln. contg. (I) or (I) is added to a coating.

The content of (1) in the aq., soln, is 0.05-2 wt. % and the content in the coating is 0.03-5 wt. 8.

In addn. to (I) the casting contains (e.g., clay, tale or titanium oxide), water-soluble polymers, (e.g. gelatin, cr polyvinyl alcohol), organic solvent-soluble polymers (e.g. polyvinyl butyral or PVC) a pH adjuster, antifoamers, lubri-

The content of (I) in the base material is 0-5-2 wt.3. since too high a content lowers the absorptivity of ink. (Appli-

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JA 0053563 MAR 1984

84-116705/19 A97 G02 DNTG 20.09.82 A(4-D5, 5-B2, 5-H3, 5-H4, 10-EBC, 12-W7D) G(2-A4A) DAINIPPON TORYO KK (MATU) *J5 9053-563-A 328 20.09.82-JP-163350 (28.03.84) C09d-11 Ink compsn. for ink jet printer - comprises water-soluble dye, wetting agent, water and water-soluble melamine cpd.

ether. diethylene glycol monobutyl ether. ethylene glycol methyl monomethyl ether acetate, tripropylene glycol methyl agent, water and water-soluble melamine cpd. ether, hydroxy-(1-4C alkyl) formamide or N-vinyl-2pyrrolidone oligomer. (D) is e.g. hexamethoxymethyl melamine or hexamethoxymethylol melamine. C84-049113 Full Patentees: Dainippon Tonyo KK; Matsushita Elec. Ind. KK. An insufficient amt. of (D) provides poor light fastness and an excess amt. of (D) forms pptes. to plug the nozzle. (E) is pref. KI, KBr. KCl, KSCN, CoSO₄, CuSO₄, NiSO₄, FeSO₄ or Ni oxalate. (6ppW 59NMDwgNoO/0). An ink compsn. for ink jet printer comprises:
(A) 0.1-15 wt.% of a water-soluble dye; (B) 5-40 wt. % of a wetting agent; (C) water;
(D) 0.1-5 wt.% of a water-soluble melamine cpd. and opt. (E) a quencher. ADVANTAGE The compan, is used for a long period of time without plugging the nozzle of the ink jet printer to provide printed images with very high light fastness. MATERIALS (A) is a water-soluble acid or direct dye. (B) is e.g. diethylene-, triethylene-, polyethylene- or propylene glycol, glycerin, ethylene glycol monomethyl J<u>5</u>9053563

AU 157 48403

JA 0053562 MAP 1984

DNTO 20.09.82 A(4-D5, 5-H3, 5-H4, 12-W7D) G(2-A4A) 84-116704/19 DAINIPPON TORYO KK (MATU) *J5 9053-562-A 327 20.09.82-JP-163349 (28.03.84) C09d-11 Ink compsn. for ink jet printer - comprises water-soluble dye, wetting (B) is e.g. diethylene-, triethylene-, polyethylene- or agent, water and e.g. chromium tri:chloride propylene glycol, glycerin, ethylene glycol monomethyl ether, diethylene glycol monobutyl ether, ethylene glycol monomethyl ether acetate, tripropylene glycol methyl ether, hydroxy-(1-4 C alkyl)formamide or N-vinyl-2-C84-049112 An ink compan. for ink jet printer compripyrrolidone oligomer.
(E) is e.g. KI, KBr, KCI, KSCN, CoSO₄, CuSO₄, FeSO₄ (A) 0.1-15 wt.% of a water-soluble dye; or Ni oxalate (6ppW 59NMDwgNo0/0) (B) 5-40 wt.% of a wetting agent; (C) water:
(D) 0.1-5 wt.% of water-soluble phosphomolybdic acid, phosphowolframic acid and/or CrCl; and opt. Full Patentees: Dainippon Toryo KK; Matsushita Elec. Ind. (E) a quencher. ADVANTAGE The compsn. is used for a long period of time without plugging the nozzle of the ink jet printer to provide printed images with high light fastness. The effect of (D) is promoted for dyes having poor light fastness. MATERIALS
(A) is a water-soluble acid or direct dye. J59053562-A